

CONTROLLED DEPOSITION AND ALIGNMENT OF CARBON NANOTUBES

ABSTRACT

A method is provided for the controlled deposition and alignment of carbon nanotubes. A carbon nanotube (CNT) attraction material is deposited on a substrate in the gap region between two electrodes on the substrate. An electric potential is applied to the two electrodes. The CNT attraction material is wetted with a solution defined by a carrier liquid having carbon nanotubes (CNTs) suspended therein. A portion of the CNTs align with the electric field and adhere to the CNT attraction material. The carrier liquid and any CNTs not adhered to the CNT attraction material are then removed.